

# Statewide 9-1-1 Emergency Telephone Service Program Report

January, 2004

Minnesota Statewide 9-1-1 Program



## MINNESOTA DEPARTMENT OF PUBLIC SAFETY

## Minnesota Statewide 9-1-1 Program



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## **Statewide 9-1-1 Emergency Telephone Service Program Report**

## I Executive Summary

#### Introduction

Minnesota's 9-1-1 emergency telephone service is a vital component of the State's emergency response system. Dialing 9-1-1 provides rapid and effective access to public safety services. Citizens of Minnesota expect that dialing 9-1-1 will link them directly to the right public safety agency and emergency personnel will have vital location information to help speed the responders to their emergency. From 1977 until the immediate past, the Minnesota Department of Administration was responsible for helping counties implement 9-1-1 service and funding part of the costs of getting 9-1-1 calls to a Public Safety Answering Point (PSAP), usually at county or city dispatch points. Pursuant to Minnesota Laws 2003, First Special Session, Chapter 1, Article 2, Section 125 the 9-1-1 responsibilities of the Commissioner of Administration have now been transferred to the Commissioner of Public Safety.

## Reporting Requirement

Minnesota Statutes, Section 403.06, Subdivision 1a requires the Commissioner of Public Safety to prepare an annual report to the legislature detailing the expenditures for maintaining the 9-1-1 system, the 9-1-1 fees collected, the balance of the 9-1-1 fund, and the 9-1-1-related administrative expenses of the Commissioner. This Statewide 9-1-1 Emergency Telephone Service Program (9-1-1 Program) Report explains the 9-1-1 expense elements (Appendix A) and provides: (1) the required financial information as of November 01, 2003, (2) projections of the 9-1-1 program financial position through June 30, 2007, and (3) a brief summary of the status of enhancements and improvements to the Minnesota 9-1-1 system.

## FY2003 Financial Update (as of November 15, 2003)

Fiscal year 2003 began with \$5,648,211 in the 9-1-1 Special Revenue Fund. Because the 9-1-1 fee had been capped at 33 cents, spending on statutorily mandated 9-1-1 costs exceeded revenue, and a great deal of this carry-forward amount was used to make up the difference.

The 9-1-1 Program collected \$20,792,730 during the year and expended \$25,175,459, which included \$428,944 for the 9-1-1-related administrative expenses. On June 30, 2003, the fund balance was \$1,265,482. This fund balance is considerably less than the two month's worth of projected fiscal year 2004 expenses which generally agreed upon business principles consider to be a prudent fund balance.

## Financial Projections (through June 30, 2007)

In 2002 projections of expense and revenues were prepared for the FY04-05 biennial budget showing the carry forward balance in the 9-1-1 Special Revenue Fund approaching zero by the

end of fiscal year 2005. Later projections, taking into account early calendar year 2003 data, predicted a deficit situation by the end of fiscal year 2005. This was reported to the legislature in the 2002 9-1-1 Annual Report, which was submitted in February of 2003 (that report is available at http://www.911.state.mn.us/PDF/2002MN9-1-1AnnualReport.pdf).

Legislation was passed in 2003 to increase the fee cap to 40 cents, and the fee was increased to 40 cents effective August 1, 2003. The legislation also provides for additional expenses to be paid from the fund beginning July 1, 2004. Although the additional revenue from the 7 cents fee increase for 11 months of fiscal year 2004 (about \$4,000,000) was expected to replenish the fund balance, much higher than anticipated costs were encountered, using up that extra revenue. Estimated prior year obligations of \$9,211,000 are much higher than previously thought, and there have been further increases in the costs to complete the wireless 9-1-1 network and database improvements.

The greatest increase in spending between fiscal years 2003 and projections for 2004 occurred due to implementation of wireless enhanced 9-1-1 and associated network and database costs. Further significant spending increases between fiscal years 2004 and 2005 are projected due to scheduled increases in Enhanced 9-1-1 Grants and Metropolitan Radio Board Grants. <u>Unless fee volumes are higher than projected, the fee is increased or spending is reduced, there will be a declining accumulated ending balance and a projected deficit of nearly \$8,500,000 by the end of fiscal year 2004. Even if the expenses for prior year obligations are somehow paid, each of the fiscal year 2005 through 2007 budget projections produce deficits. (See Figure 1).</u>

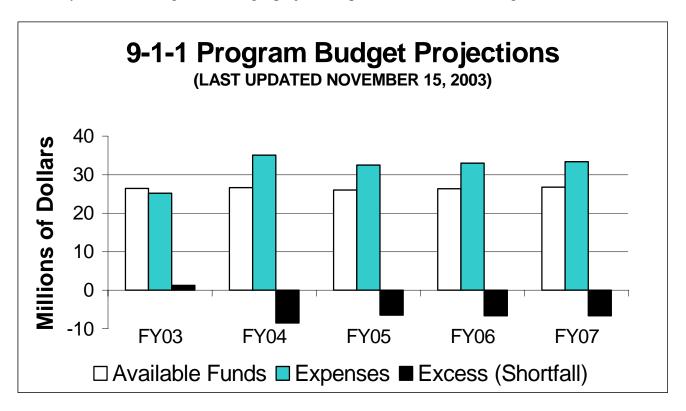


Figure 1. 9-1-1 Fund Deficits Projected in Fiscal Year 2004

## Structural Funding Problem

A total of \$5,064,282 in prior year obligations was paid in FY 2003. There is an additional \$9,211,000 in prior year obligations that cannot be paid at this time. Aside from the prior year obligations, there is a structural imbalance in the 9-1-1 Emergency Telecommunications Service Fund of approximately \$6.6M per year (equivalent to an annual fee collection of ten cents). See Appendix A. Most all of the projected obligations in FY 2004-07 are obligations that the State is mandated to pay. The 9-1-1 system costs under M.S. 403.11 are not capped. However, the spending authority is capped in session law both by the fee cap and by direct appropriations from the 9-1-1 Fund.

## Status of Enhancements and Improvements to the Minnesota 9-1-1 System

Maintaining, enhancing, and expanding 9-1-1 services for both wired and wireless technologies are required under Minnesota Statutes, Section 403.01, subdivision 7. Significant progress has been made to integrate wireless 9-1-1 into the Enhanced 9-1-1 systems, increase the interoperability of separate 9-1-1 systems, and position the state to be able to take advantage of Enhanced 9-1-1 services for wireless. As of November 15, 2003, 16 out of 20 wireless carriers provide Phase I (tower location and callback number) Enhanced Wireless 9-1-1 among all 87 counties. In addition to Phase I, Phase II (latitude and longitude of the caller) is provided by 7 wireless carriers among 72 counties containing over 95 % of the population. Status updates are regularly posted on the Minnesota 9-1-1 website, www.911.state.mn.us.

#### Conclusion

The success of the 9-1-1 Program is a product of extensive cooperation among legislators, regulators, state and local government administrators and the telecommunications industry. Continued success will require appropriate funding and further cooperation to solve the current and worsening problems caused by the growth of wireless telephone service and emerging new technology.

## II. Background

The 9-1-1 emergency number provides rapid access to emergency services, which saves time for the caller in dialing and reduces overall response time for emergency service providers. The 9-1-1 system is currently evolving into an Enhanced 9-1-1 system that will allow caller location to be displayed even if the caller does not or cannot provide their address, or, in some wireless calls, has no address. Statewide 9-1-1 coverage is provided by 87 county systems plus 19 city systems and 13 Public Safety Answering Points (PSAPs) operated by state and other government agencies.

The universal emergency 9-1-1 number is available throughout the state of Minnesota on wired and wireless phone lines. For wireless telephones, Federal Communication Commission (FCC) rules (Title 47, CFR 20.18) require the wireless carriers to put all 9-1-1 calls through to a PSAP, even if the caller is a non-subscriber.

The 9-1-1 Program at the Department of Public Safety provides technical assistance to the cities and counties implementing, maintaining, and improving 9-1-1 systems, and oversees system standards. It also pays from money collected through a monthly statewide wired and wireless telephone fee the state's share of wired and wireless 9-1-1 costs authorized by Minnesota Statutes, Section 403.11 and contracted for with carriers; administers grant funds for 9-1-1 agencies in accordance with Minnesota Statutes, Section 403.113; and distributes funds to the Metropolitan Radio Board in accordance with Minnesota Statutes, Section 673.901.

The 9-1-1 fee is set by the Commissioner with the consent of the Commissioner of Finance. Effective August 1, 2003, the Commissioner of Administration (prior to turning over the program to the Commissioner of Public Safety) increased the fee from 33 cents to the cap of 40 cents in order to fund statutorily required costs. The fee collections are deposited in the 9-1-1 Special Revenue Fund, and these funds are appropriated by the Legislature to the Commissioner of Public Safety to cover the expenses authorized by statute.

## III. Statutorily Required 9-1-1 Obligations

Fiscal Year 2003 <u>statutory obligations</u> required a spending rate of 40¢ against a revenue collection rate of 33¢, made up for by out of the Special Revenue Fund balance, and subject to appropriations.

■ M.S. 403.11: Network and database charges for 9-1-1 (12.7¢)

Reimbursements were made to local exchange carriers and 9-1-1 service providers (Qwest and Independent Emergency Services (IES)) for costs incurred connecting telephone central offices with 9-1-1 networks. According to statute, all certified costs <u>must</u> be reimbursed by the State.

■ M.S. 403.113: Enhanced 9-1-1 Grants (PSAP payments) (10.0¢)

PSAPs in 87 counties, 3 other governmental entities, and State Patrol Communications centers receive grants from the State to help defray their 9-1-1 costs. The amount paid to PSAP's was determined by the Commissioner of Administration based upon PSAP needs and the amount of appropriation authority/funds left after all other statutory requirements are fulfilled. Historically, 10 cents of the 9-1-1 fee has been distributed to the PSAP's.

■ M.S. 403.11: Wireless 9-1-1 Transfers (0.8¢)

2-cents of the wireless customer 9-1-1 fee was directly transferred to the Minnesota State Patrol to offset the costs, including administrative and staffing costs, incurred in handling 9-1-1 emergency calls made from cellular phones.

■ M.S. 403.11: Enhanced Wireless 9-1-1 Implementation (3.7¢)

Wireless carriers sign agreements with the State to implement enhanced 9-1-1 wireless services. The implementation costs incurred by these carriers and by the 9-1-1 service providers were reimbursed by the State and after implementation, ongoing operations costs were reimbursed. The reimbursement amounts increased as more carriers implemented the service and ongoing operations expenses increase.

■ M.S. 473.901 (now M.S.403.30): Metropolitan Radio Board Grants (4.0¢)

The Metropolitan Council approved an annual budget for the Metropolitan Radio Board. The Commissioner of Administration was required to distribute one twelfth of the approved budget to the Metropolitan Radio Board each month as long as it did not exceed the equivalent of 4-cents on every customer line.

■ M.S. 403.11: Administrative Expenses Including Salaries (0.7¢)

Total cost is based upon administrative expense allocations, bargaining unit contracts, travel, and other miscellaneous expenses.

• M.S. 403.11: Other Obligations (8.0c)

Prior year obligations that were carried forward and expensed in fiscal year 2003. As part of a telephone industry initiative to revise the 9-1-1 law, the 2002 Legislature changed M.S. 403.11 (Minnesota Laws 2002, Chapter 237, Section 15) to encourage those companies that had not certified their prior and future charges to do so. Effective ninety days after January 1, 2003, the 9-1-1 Program was only allowed to reimburse telephone companies for old charges going back for two years, eliminating a bookkeeping headache caused by ever mounting uncertified obligations. This change led to hundreds of certifications being submitted in fiscal year 2003 where the costs were actually incurred in previous fiscal years. After years of estimating charges based on estimates and billings, intensive efforts by program staff in reviewing and reconciling the certifications resulted in firm estimates only after the close of Fiscal Year 2003, leaving much of the newly certified back payment obligations to be paid in subsequent fiscal years.

## IV. Financial Update (as of November 15, 2003)

As required by Minnesota Statutes, Section 403.11 and outlined in the above section, part of the costs of 9-1-1 in Minnesota are funded through a statewide uniform 9-1-1 fee.

Fiscal year 2003 began with \$5,648,211 in the 9-1-1 Special Revenue Fund. Because the 9-1-1 fee had been capped at 33 cents, spending on statutorily mandated 9-1-1 costs exceeded revenue, and a great deal of this carry-forward amount was used to make up the difference.

The 9-1-1 Program collected \$20,792,730 during the year and expended \$25,175,459, which included \$428,944 for the 9-1-1-related administrative expenses. On June 30, 2003, the fund balance was \$1,265,482. This fund balance is considerably less than the two month's worth of projected annual expenses which generally agreed upon business principles consider to be a prudent fund balance.

## V. Financial Outlook (through June 30, 2007)

The legislature changed Chapter 403 during the 2002 session, reinstating the Commissioner's authority to set the 9-1-1 fee within a range authorized by statute, and with the approval of the Commissioner of Finance. This allowed the increase in the fee to 33 cents to meet statutory funding requirements at least equal to the equivalent of 33-cents in fiscal years 2003, 2004 and 2005. After legislation changed the fee cap to 40 cents, the fee was increased to 40 cents effective August 1, 2003.

A recent review of the 9-1-1 funding plan, using updated cost projections and November 2003 projections of revenue volumes, shows that the current 9-1-1 fee level of 40 cents will not meet the foreseen funding needs of the state funded parts of the 9-1-1 Program. Any carry-forwards in the account will be depleted before the end of fiscal year 2004 in order to meet statutorily mandated obligations. Also, some money needs to be maintained in the special revenue fund to meet current expenses because revenues lag expenses by at least one month.

Current projections of these customer volumes and expenses indicate a shortfall of \$8,500,000 for the 9-1-1 Program at the end of fiscal year 2004, due to the large prior year obligation. The amount of the prior years newly certified obligations that have been claimed by wired and wireless carriers by March 31, 2003 affect the fund balance. Minnesota Laws of 2002, Chapter 372, Section 15 amended M.S. 403.11 by allowing all wireless and wire line telecommunication service providers a 90 day window (January 1, 2003 through March 31, 2003) to submit claims for reimbursement of all certifiable costs incurred anytime prior to January 1, 2003 without regard to contract provisions of this section of law. A total of \$14,275,282 in prior year obligations was certified for reimburse to the telecommunication service providers. Now the telecommunication service providers are required to submit their certifiable expenses under this section within two years of the occurrence. A total of \$5,064,282 in prior year obligations was paid in FY 2003. There is \$9,211,000 in prior year obligations that cannot be paid at this time. See Appendix A.

Aside from the \$9,211,000 prior year obligation, there is a structural imbalance in the 9-1-1 Emergency Telecommunications Service Fund of approximately \$6.6M per year (equivalent to

an annual fee collection of ten cents). Most all of the projected obligations in FY 2004-07 are obligations that the State is mandated to pay. The 9-1-1 system costs under M.S. 403.11 are not capped. However, the spending authority is capped in session law by direct appropriations from the 9-1-1 Fund and 9-1-1 Fund revenues are capped at 40 cents a month on all wireless and wire line customers.

If funding shortfalls cannot be resolved by increasing the 9-1-1 fee, cutting spending by the Department of Public Safety would be problematic because all major expenses are locked in by legislation or contract.

### VI. 9-1-1 Goals and Status

## Goal: Provide Enhanced 9-1-1 Benefits to Wireless 9-1-1 Callers

Although the present Enhanced 9-1-1 systems routinely provide public safety responders an accurate location of each wired emergency caller when 9-1-1 is dialed from traditional landline telephones, it is more difficult to determine caller location from wireless telephones. The increasing use of cellular telephones by the public means that cellular 9-1-1 calls are becoming as likely to be placed from dwellings, sidewalks, boats or snowmobiles as from cars on highways.

Efforts to have cellular 9-1-1 emergency calls integrated into the Enhanced 9-1-1 systems to provide caller location and callback number to be displayed at the answering PSAP are ongoing. Also, the Enhanced 9-1-1 systems continue to be improved to allow rapid transfers of misdirected wireless 9-1-1 calls among all nearby PSAPs, including those which are served by different Enhanced 9-1-1 systems.

Status: At the end of calendar year 2000, only one wireless carrier had provided FCC Enhanced Phase I (general location and callback number) service. By the end of 2001, three more had implemented it. In calendar year 2002, a fifth wireless carrier implemented Phase I in the Metropolitan area, seven wireless carriers began providing Phase I service among 58 counties in Greater Minnesota, and one carrier had also implemented a version of Phase II (latitude and longitude of the 9-1-1 caller) in four Greater Minnesota counties. During calendar year 2003, Phase I carriers increased to 16, and 7 carriers now also provide Phase II in 77 counties, covering over 95% of the population. Appendix B contains details. As of November 15, 2003, nearly all the PSAPs have converted PSAP equipment to accept the Phase II information, which many wireless carriers are now, or will soon be providing. Status updates are regularly posted on the Minnesota 9-1-1 website, www.911.state.mn.us.

## Goal: Incorporate Wireless 9-1-1 Calls into Existing Enhanced 9-1-1 Systems

Minnesota Statutes, Section 403.08, Subdivision 7 requires cooperation among wireless carriers and 9-1-1 service providers to plan for and implement Enhanced Wireless 9-1-1. It also requires

the Department of Public Safety to coordinate planning and to contract with wireless carriers and 9-1-1 service providers to integrate wireless 9-1-1 calls into Enhanced 9-1-1 systems; and authorizes funding from the 9-1-1 Special Revenue Fund to be used for both the installation and recurring costs for integrating wireless 9-1-1 calls into Enhanced 9-1-1 systems.

<u>Status</u>: As required by Minnesota Statutes, Section 403.08, the 9-1-1 Program developed plans for integrating cellular service into the Enhanced 9-1-1 systems. These plans have been updated periodically as new information is learned and changes occur in both the cellular and 9-1-1 systems.

## Goal: Route Existing Wireless 9-1-1 Calls to Local Public Safety Answering Points

In the early 1980's, as the first wireless systems were deployed in Minnesota, the Minnesota State Patrol was designated as the default answering point for basic 9-1-1 calls. In that era, up to 85% of wireless 9-1-1 calls were from cars on highways, and the technology was not readily available to reliably send calls to local PSAPs. As wireless communications developed, a larger number of 9-1-1 calls were placed from portable phones that were not on highways. The 9-1-1 law was changed in 1997 to provide for calls to be answered by local PSAPs pending implementation of enhanced wireless 9-1-1 service.

<u>Status:</u> Largely overtaken by events due to extensive implementation of Phase I and II, the goal is considered accomplished. A few carriers that have not yet implemented Phase I or II have calls routed directly to a local PSAP rather than a district State Patrol communications center. This Phase 0 service is a temporary measure, pending implementation of Phase I, then Phase II Enhanced 9-1-1 service. No location or callback information is provided, and investigating misrouted calls is difficult.

## Goal: Improve the Interoperability Capabilities of Minnesota 9-1-1 Systems

Minnesota is in the forefront of Enhanced 9-1-1 implementation and in a good position to implement wireless Enhanced 9-1-1 statewide because nearly 98 percent of the state's wired telephones are served by selective router based Enhanced 9-1-1 systems. Delivering emergency calls to 9-1-1 PSAPs through selective routers allows calls to be sent to the correct PSAP regardless of caller location, and facilitates transfers to neighboring PSAPs. This generally holds true only if the correct 9-1-1 PSAP is connected to the same 9-1-1 system as the caller's telephone exchange or cellular mobile switching center. The purpose of interoperability improvements is to allow 9-1-1 calls to be selectively routed and transferred between different systems. This applies both to different 9-1-1 service providers Qwest and IES in Minnesota, and to state border issues, such as between Washington and Goodhue served by Qwest 9-1-1 systems and Saint Croix and Pierce served by the SBC Ameritech 9-1-1 system.

<u>Status</u>: The Enhanced 9-1-1 selective router contract with Qwest has been modified to have the five Lucent Model 5E 9-1-1 selective routers provided by Qwest connected together so that any 9-1-1 call on a Qwest selective router can be transferred to any PSAP served by another Qwest selective router. The 9-1-1 Program has requested IES to make a similar interconnection among their seven CML Model ECS-1000 selective routers. The eventual goal is for these two different

types of selective routers to be able to selectively route or transfer to each other too. Qwest and IES jointly developed plans and conducted tests during 2003 to explore interoperability issues between their two different 9-1-1 network and database systems.

Transfers between Qwest and IES selective router based 9-1-1 systems have been performed in tests. Current emphasis is on the borders between Carver and Scott on a Qwest 9-1-1 system and McLeod and Sibley on an IES 9-1-1 system. Numerous technical and database concerns were identified in those tests that are currently being addressed by the 9-1-1 service providers.

### Goal: Contract with Wireless Providers and 9-1-1 Service Providers

Implementation of Phase I Wireless Enhanced 9-1-1 involves extensive coordination with local PSAPs in order to help determine where calls should be answered and develop plain language cell sector descriptions for display at the PSAP.

<u>Status</u>: A total of sixteen wireless carriers are covered by twelve contracts for Phase I (one more than in 2002). These carriers provide wireless service to approximately 95 percent of all Minnesota customers. Several other carriers are in various stages of the contracting process. The target for having all wireless carriers under contract is June 30, 2004.

### VII. Added Considerations/Risks

While good progress to date has been made in the conversion to Enhanced 9-1-1, the following challenge jeopardizes the effectiveness of the 9-1-1 Program:

## Costs for maintaining and improving 9-1-1 are increasing

The 9-1-1 Program is making progress to integrate wireless 9-1-1 into the Enhanced 9-1-1 systems and increase the interoperability of separate 9-1-1 systems in order to take advantage of future fully Enhanced Wireless 9-1-1 services. Improving the Enhanced 9-1-1 networks and connecting wireless carriers will increase the authorized expenditures required for the 9-1-1 Program. Appendix A contains a table showing the different expense elements for 9-1-1, where it is paid, and cent fee equivalents for each cost element in each fiscal year.

Public Safety Communications Associations and local government agencies recognize that additional expensive upgrades are needed at PSAPs to deal with wireless issues. Specifically, mapping systems and 9-1-1 answering equipment will need to be upgraded to provide more complex information to 9-1-1 call takers and to interface with map coordinate based instead of address based location readouts. Minnesota local units of government pay for their 9-1-1 costs from a mix of property tax revenue and telephone 9-1-1 fee grant funds. Whether more of local 9-1-1 costs should be funded out of local taxes or telephone fees is a public policy issue the Legislature may be asked to decide.

#### VIII Conclusion

The current 9-1-1 fee level of 40 cents will not meet the foreseen funding needs of the state funded parts of the 9-1-1 Program through fiscal year 2004. Even if wired and wireless customer volumes prove to be higher than projected, the resultant increase in income would not be enough to realistically cover the expenses, much of which do not change with customer volume. The current projections of customer volumes and expenses indicate a shortfall of \$8,496,771 for the 9-1-1 Program at the end of fiscal year 2004. Either funding shortfalls must be resolved by increasing the 9-1-1 fee, or the Department of Public Safety will have to find a way to cut program spending by amounts that would mean an inability to perform the 9-1-1 functions required by statute All major expenses are locked in by legislation or contract, so it appears that cutting 9-1-1 funding would require legislative action.

The success of the 9-1-1 Program is a product of extensive cooperation among legislators, regulators, state and local government administrators and the telecommunications industry. Continued success will require appropriate funding and further cooperation to solve the current and worsening problems caused by the growth of wireless telephone service and emerging new technology.

## Appendix A. –9-1-1 Revenue / Expenses Required by Statute Fiscal Year 2003 Through 2007

ITEM	SOURCE	ACTUAL FOR FY 2003	FY 2003 FEE EQUIV.	PROJECTED FOR 2004	FY 2004 FEE EQUIV.	PROJECTED FOR 2005	FY 2005 FEE EQUIV.	PROJECTED FOR 2006	FY 2006 FEE EQUIV.	PROJECTED FOR 2007	FY 2007 FEE EQUIV.
INCOME	9-1-1 FEE SUBMISSION	\$ 20,792,730	33.0	\$ 25,358,988	39.4	\$ 26,034,560	40.0	\$ 26,384,720	40.0	\$ 26,756,240	40.0
EXPENSES											
9-1-1 System Costs, Network and Database charges	9-1-1 service providers (Qwest and Independent Emergency Services, Ic) and Incumbent local and interexchange, carriers	\$ 7,997,006	12.7	\$ 11,200,000	17.4	\$ 11,200,000	17.2	\$ 11,200,000	17.0	\$ 11,200,000	16.7
Enhanced 9-1-1 Grants	Counties, Cities, UoffM PD, Airport PD, and Red Lake Nation PD	\$ 5,986,202	9.5	\$ 6,111,892	9.5	\$ 7,110,689	10.9	\$ 7,206,327	10.9	\$ 7,307,798	10.9
	Transfer to Minnesota State Patrol	\$ 315,063	0.5	\$ 321,679	0.5	\$ 374,247	0.6	\$ 379,280	0.6	\$ 384,621	0.6
Wireless 9-1-1 Transfers	Transfer to Minnesota State Patrol	\$ 544,130	0.9	\$ 579,021	0.9	\$ 611,812	0.9	\$ 633,233	1.0	\$ 655,528	1.0
Implement Wireless Enhanced 9-1-1	9-1-1 service providers (Qwest and Independent Emergency Services, Ic) and wireless carriers	\$ 2,345,464	3.7	\$ 4,492,761	7.0	\$ 4,372,137	6.7	\$ 4,503,301	6.8	\$ 4,638,400	6.9
Metropolitan Region Radio System Grants	Metropolitan Council	\$ 2,494,368	4.0	\$ 2,573,428	4.0	\$ 3,579,752	5.5	\$ 3,627,899	5.5	\$ 3,678,983	5.5
Shared Statewide Radio System Grants	Metropolitan Council or follow-on agency	\$ -	15	\$ -	8	\$ 4,881,480	7.5	\$ 4,947,135	7.5	\$ 5,016,795	7.5
Prior Year Obligations	9-1-1 service providers (Qwest and Independent Emergency Services, Ic) and Incumbent local, interexchange, and wireless camers	\$ 5,064,282	8.0	\$ 9,211,000	14.3	\$ -	2	\$ .	3	\$ .	20
Consolidation and Minimum Standards Study	Management Analysis Division of the Department of Administration.	s -	:	\$ 150,000	0.2	s -		\$	- 25	\$ .	14
Administrative Expenses Including Salaries	Veries	\$ 428,944	0.7	\$ 481,461	0.7	\$ 468,459	0.7	\$ 473,636	0.7	\$ 479,028	0.7
TOTAL CURRENT	EXPENSES	\$ 25,175,459	40.0	\$ 35,121,241	54.6	\$ 32,598,576	50.1	\$ 32,970,811	50.0	\$ 33,361,153	49.9
CONTRIBUTION TO	CARRYOVER/(DEFICIT)	\$ (4,382,729)	(7.0)	\$ (9,762,253)	(15.2)	\$ (6,564,016)	(10.1)	\$ (6,586,091)	(10.0)	\$ (6,604,913)	(9.9

# **Appendix A. – Notes regarding 9-1-1 Expenses Required by Statute** (Continued from previous page)

#### **Notes**

This 9-1-1 Funding Matrix show projections of the different expense elements for 9-1-1 expenses in each fiscal year from 2003 (actual) and 2004 through 2007 (projected).

Fee Equivalents are indicated to provide a general idea of funding needs. Fee amounts shown for each expense element are rounded to the nearest 0.1 penny and somewhat skewed by the wireless 9-1-1 transfer expense, which is assessed only on wireless customers rather than all fee payers.

Assumed annual fee collection from one cent based on wired and wireless customer growth							
FY 2003 Actual	FY 2004	FY 2005	FY 2006	FY 2007			
collections	projected	projected	projected	projected			
\$ 630,083	\$ 643,357	\$ 650,864	\$ 659,618	\$ 668,906			

Total fee equivalent expenses for each year exceed the fee income (33 cents in fiscal year 2003 and 40 cents after August 1, 2003).

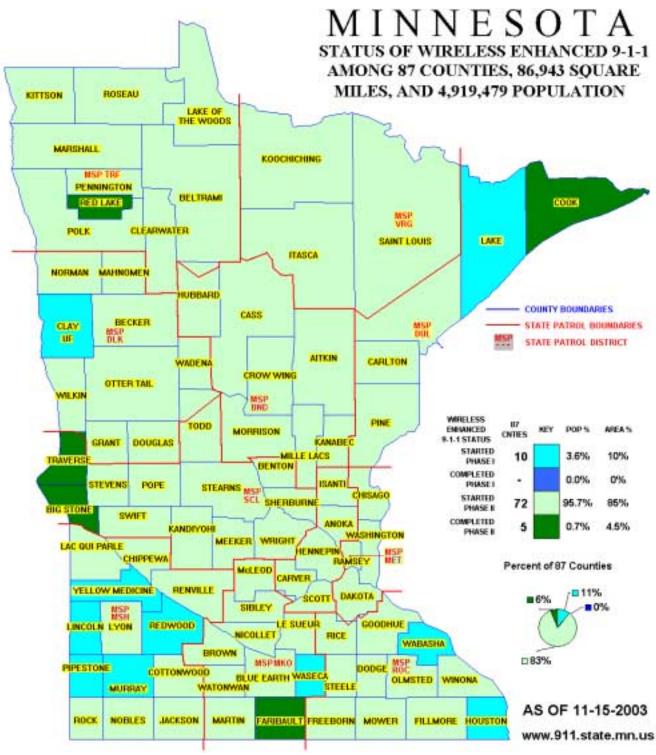
The major cause of unanticipated obligations in 2004 is the estimated \$9,200,000 of prior year obligations. In 2001, a 9-1-1 Law change set a deadline of March 31, 2003 for all carriers to certify their 9-1-1 charges in order to be reimbursed back to the in-service date of a 9-1-1 system modification. The law previously had no time limit. Over the past 5 years, 65 counties modified their 9-1-1 systems, but most carriers (multiple carriers per county) had not certified their charges. The new deadline caused a one-time bow wave of certifications at the end of March. A firm estimate of the obligation was not available until these certifications were reviewed and reconciled.

Comparing fiscal year 2003 and projected future years shows 9-1-1 system costs increase from about 12.7 cents of the 9-1-1 fee to 17.4 cents and wireless enhanced 9-1-1 costs increase from about 3.7 cents of the 9-1-1 fee to 7 cents in fiscal year 2004 related to converting to Wireless Enhanced 9-1-1.

Expense element increases for Enhanced 9-1-1 Grants and Wireless 9-1-1 Transfers are directly caused by increases in the number of wire line and wireless customers paying the fee because they are based on a fixed number of cents of the fee. An additional cost increase is shown in fiscal year 2005 due to a scheduled grant increase from 10 cents to 11.5 cents. The Metropolitan Radio Board budget for fee income is limited by statute not to exceed 4 cents of the fee. M.S. 411.30 increases the limit to 5.5 cents plus another 7.5 cents on July 1, 2004.

If funding shortfalls require cutting spending rather than increasing the 9-1-1 fee, the Commissioner of Public Safety is limited to decreasing the amount from wireless customers to be transferred to Minnesota State Patrol. All other major expenses are locked in by legislation or contract. Even that drastic action would not solve the shortfall, since it would represent a savings of only \$579,021 in fiscal year 2004 against a deficit of over \$8,500,000.

Appendix B. - Cellular 9-1-1 Status in Minnesota



Sixteen of the twenty wireless carriers have converted to Phase I wireless enhanced 9-1-1 with cell sector location and callback number. At least one carrier in each of the 87 counties is providing Phase I. In addition to Phase I, seven wireless carriers are providing Phase II wireless enhanced 9-1-1 that sends the latitude and longitude of the 9-1-1 caller. At least one of these carriers are providing the location service in 72 counties (covering over 95% of the population), and Big Stone, Cook, Faribault, Red Lake and Traverse counties are 100% Phase II.